

**IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN OF PENNSYLVANIA**

**IN RE: NATIONAL FOOTBALL
LEAGUE PLAYERS' CONCUSSION
LITIGATION**

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No. 12-md-2323 (AB)

MDL No. 2323

**THIS DOCUMENT RELATES TO:
ALL ACTIONS**

DECLARATION OF JAMSHID LOTFI, M.D., FRCP (LONDON)


STATE OF TEXAS §
 §
COUNTY OF HARRIS §

My name is Jamshid Lotfi, MD, FRCP (London). I am competent to execute this declaration. All matters testified to herein are within my personal knowledge and are true and correct.

1. I am a Neurologist licensed to practice medicine in Texas. I have been a Fellow of the Royal College of Physicians of London since 1986. I have been practicing neurology in Houston, Texas for more than 25 years. Attached as Exhibit A hereto is my curriculum vitae.
2. As part of my neurology practice, I regularly treat patients with neurocognitive disorders including Dementia and Alzheimer's Disease. I am familiar with the diagnostic criteria for Dementia. I have been asked whether it was appropriate and reliable for Thomas Vasquez Ph.D., in his NFL Concussion Liability Forecast report dated February 10, 2014 to use studies pertaining to dementia as a proxy or surrogate for the qualifying diagnosis of Level 1.5 Neurocognitive Impairment and Level 2 Neurocognitive Impairment, as defined in the settlement agreement after the effective date, to establish incidence rates or forecast the number of class members who will qualify for monetary awards.
3. I have reviewed the settlement agreement criteria for Qualifying Diagnosis for Monetary Awards for Level 1.5 Neurocognitive Impairment and Level 2 Neurocognitive Impairment (Exhibit 1 as amended), the Neurological Test Score Criteria by Domain of Cognitive Functioning (Exhibit 2), and the NFL Concussion Liability Forecast prepared by Thomas Vasquez Ph.D. dated February 10, 2014 including Appendix A, and dementia studies referred to in the subject report.

Exhibit A

4. Level 1.5 or Level 2 neurocognitive impairment as defined by the settlement agreement are not recognized in any medical journal, literature, textbook or diagnostic manual as a diagnosable medical condition. There are no studies in the medical literature which provide any historical incidence or prevalence rates for either of these qualifying diagnoses under the settlement agreement.
5. The criteria used for diagnosing a patient with Dementia using generally accepted diagnosing criteria are materially different than the qualifying diagnosing criteria for a Level 1.5 or Level 2 neurocognitive impairment under the Settlement Agreement. Accordingly, it would be inappropriate to suggest that medical studies and data for Dementia would be an appropriate surrogate or proxy for a Level 1.5 or Level 2 neurocognitive impairment diagnoses under the Settlement Agreement. Thus, the Dementia studies cited by Thomas Vasquez are not reliable sources for predicting how many former players will have Level 1.5 or Level 2 diagnoses under the Settlement Agreement.
6. It is noteworthy that the subject settlement agreement did not specifically use dementia as a qualifying diagnosis. Some of the differences between the diagnostic criteria for dementia, during the time period of the studies cited by the Thomas Vasquez forecast, and Level 1.5 or Level 2 neurocognitive impairment include a) dementia required memory impairment unlike the subject qualifying diagnoses; b) dementia did not require the cognitive testing like that of the battery of neuropsychological testing protocol in Exhibit 2 to the settlement agreement; c) dementia did not require any quantification of the standard deviations below the person's expected level of premorbid functioning; and d) criteria for functional impairment to diagnose dementia, during the period addressed in the studies, was satisfied by subjective impairment in social or occupational functioning unlike the subject qualifying diagnoses which require different criteria and evidence for such criteria.
7. The opinions set forth herein are based on my education, training and experience obtained to date and are based on a reasonable degree of medical probability.
8. I declare under the penalty of perjury that the foregoing is true and correct.



JAMSHID LOTFI, MD

4.19.2017

DATE

JAMSHID LOTFI

N.B. First name sometimes alternatively spelt as DJAMCHID

PERSONAL INFORMATION

▪ Marital status: Married with two children

Nationality: US Citizen American-Iranian

Date of Birth: 23rd March 1937

ADDRESS:

HOME : 7515 Chevy Chase Drive, Houston, TX. 77063, USA

TELEPHONE: 1 713 974 4757

E-mail address: lotfi99@yahoo.com

EDUCATION

1957 –1963

The Medical College of St. Bartholomew's
Hospital, University of London, England
(M. B., B. S.) Bachelor of Medicine & Surgery (London)

Examination of the conjoint Board of Examiners of the
Royal College of Physicians of London and the Royal
College of Surgeons of England
(M.R.C.S.L.R.C.P.)

1965

Diploma in Child Health, (England)
(D.C.H.)

1968

Examination for the Membership of the Royal College of
Physicians of London.
(M.R.C.P.) (London)

1986

London

Fellowship of the Royal College of Physicians of
(F.R.C.P.) (London)

EXAMINATIONS PASSED IN THE USA

Foreign Medical Graduates Examinations in Medical Sciences (FMGEMS),
ECFMG No 052-423-1

1988

Federal Licensing Examinations (*FLEX*) ID No 37032350

POST GRADUATE TRAINING & PROFESSIONAL EXPERIENCE

08.1963-08.1964

House Physician & House Surgeon
Redhill General Hospital
Redhill, Surrey, England

09.1964 -10.1965

Senior House Officer - Pediatrics
Queen Mary's Hospital for Children,
Carshalton, Surrey, England

01.1966-06 1966

Senior House Officer -Internal Medicine and Chest Disease,
Central Middlesex Hospital, London, England

01.1967-08.1969

Registrar - Internal Medicine and Neurology.
Central Middlesex Hospital, London, England

11.1969-04.1970

Senior House Officer Neurology.
National Hospital for Nervous Diseases,
Queen Square, London, England

04.1970-08.1970

Locum Registrar -Neurology.
National Hospital for Nervous Diseases,
Queen Square, London, England

08.1970-08.1987

Assistant & later Associate Professor of Neurology.
University of Tehran, Tehran, Iran

10.1981-04.1982

Honorary Clinical Assistant.
National Hospital for Nervous Diseases,
Queen Square, London, England

08.1970-08 1987

Head of Department of Internal Medicine & Chief of Department of
Neurology.
Shariati Hospital, University of Tehran,
Tehran, Iran

08.1987-04.1990

Research Associate and Associate Director.
Cerebral Blood Flow Laboratory, Department of Neurology, Veterans

Administration Medical Center,
Houston, Texas, USA.
04.1990-04.1994

Neurologist.
St. Luke's Episcopal Hospital,
Houston, Texas, USA.

08.1990-04.1994
Clinical Assistant Professor of Neurology.
Baylor College of Medicine, Houston, Texas, USA.

1994 – ~~Present~~ **2009**
Professor of Neurology.
University of Tehran, Tehran, Iran.

2009 – PRESENT NEUROLOGIST 1) METHODIST HOSP BAYTOWN
PROFESSIONAL SOCIETY MEMBERSHIPS 2) United Neurology HOUSTON

Full Medical Registration (since 1964)
Permanent Medical Registrar, General Medical Council,
England (Reg. No. 0465494)

Member	Royal College of Surgeons, England
Fellow	Royal Society of Medicine, London (No. 0187814)
Fellow	Royal College of Physicians, London
Associate Clinical Member	American Academy of Neurology
Member	Texas Medical Association
Member	Harris County Medical Society
Member	Houston Neurological Society
Member	Association of British Neurologists
President	Iranian Multiple Sclerosis Society

LICENSER

Iranian Medical Council, License No. 9258. (1970)

Texas State Board, License No. H. 67741. (1989)

The University of the State of New York, License No. 181470. (1990)

CERTIFICATES & AWARDS

July 1987	Certificate of Good Standing, General Medical Council, England.
May 2007	The International Avicenna Award of Excellence in Teaching and Research in Medical Sciences, Association of Iranian Physicians & Dentists in Germany (VIA)

CONSULTANT APPOINTMENTS & HOSPITAL PRIVILEGES

St Luke's Episcopal Hospital, Houston, Texas, USA.

Methodist Hospital, Houston, Texas, USA.

Veterans Administration Medical Center, Houston, Texas, USA.

Metagorda General Hospital, Bay City, Texas, USA.

Herman Hospital, Houston, Texas, USA.

Consultant Physician Jam General Hospital, Tehran, Iran.

TEACHING APPOINTMENTS

Preceptor Instructor- Baylor College of Medicine, Houston, Texas, USA.

Instructor- University of Tehran, Dr. Shariati Medical Center, Tehran, Iran

Instructor- Free University of Iran, Tehran, Iran

Examiner- Iranian Board of Neurology, Tehran, Iran.

Expert- Iranian Medical Council, Tehran, Iran.

PRESENTATIONS AND PUBLICATIONS

1. Lotfi J., Derakhshan J. A clinical neurological syndrome not fully described in English Literature (abstract). Eighth Pahlavi Medical Congress, Shiraz, Iran, May 1977
2. Lotfi J., Massoud M. Study of the cell mediated immunity in multiple sclerosis in Iran (abstract) Proceedings of the 11th World Congress of Neurology, Amsterdam, Holland, September 1977

3. Lotfi J., Nikbin B. Histocompatibility antigens in multiple sclerosis in Iran (abstract) Proceedings of the 11th World Congress of Neurology, Amsterdam, Holland, September 1977
4. Lotfi J. Subacute sclerosing panencephalitis in Iran (abstract) Proceedings of the 11th World Congress of Neurology, Amsterdam, Holland, September 1977
5. Lotfi J., Massoud M., Lymphocyte stimulation with measles antigen in Iran. (abstract) Ninth Pahlavi Medical Congress, Shiraz, Iran, May 1978.
6. Lotfi J., Forouzanfar M., Massoud M. Cell mediated immunity and lymphocyte subpopulation studies in thymectomized and non-thymectomized patients with myasthenia gravis. (abstract) 4th International Congress on Neuromuscular Diseases Montreal, Canada, September 1978
7. Lotfi J., Nikbin B. Chemotaxis and random motility in thymectomized and non-thymectomized patients with myasthenia gravis (abstract) 4th International Congress on Neuromuscular Diseases, Montreal, Canada, September 1978
8. Lotfi J., Nikbin B. Humoral immunity in thymectomized and non-thymectomized patients with myasthenia gravis (abstract) 4th International Congress on Neuromuscular Diseases, Montreal, Canada, September 1978
9. Lotfi J., Nikbin B. DRW antigen in multiple sclerosis in Iran. (abstract) Excerpta Medical Publications Twelfth World Congress of Neurology, Kyoto, Japan, September 1981
10. Lotfi J., Nikbin B., Massoud M. Lymphocyte subpopulation in myasthenia in Iran. (abstract) Excerpta Medical Publications, Twelfth World Congress of Neurology, Kyoto, Japan, September 1981
11. Lotfi J. Transfer factor in the treatment of subacute sclerosing panencephalitis (abstract) Excerpta Medical Publications, Twelfth World Congress of Neurology, Kyoto, Japan September 1981
12. Lotfi J., Anaraki F. Transfer factor in the treatment of subacute sclerosing panencephalitis (abstract), Sixth Asian and Oceanian Congress of Neurology, Taipei, Republic of China, 1983
13. Lotfi J. Multiple sclerosis in Iran (abstract) Thirteenth World Congress of Neurology, Neurology, Hamburg, West Germany, 1985
14. Lotfi J., Hakami A: Myasthenia Gravis in Iran: Report of the effects of thymectomy in 50 cases (abstract) Sixth International Congress of Neuromuscular Diseases, Los Angeles, California, USA, July 1986
15. Lotfi J., Pourmahmoudian H. Hereditary mutilating sensory neuropathy with pyramidal tract signs, American Academy of Neurology, 40th Annual Meeting, Cincinnati, Ohio, USA 1988
16. Harati Y., Lotfi J. Avicenna, facial palsy, and trigeminal neuralgia, American Academy of

Neurology, 41st Annual Meeting, Chicago, Illinois, USA 1989

17. Lotfi J., Pourmahmoudian H. Neurological manifestation of hypoparathyroidism in 28 patients (abstract) Fourteenth World Congress of Neurology, New Delhi, India 1989
 18. Pourmahmoudian H., Lotfi J. Thymic pathology in 69 generalized myasthenia gravis patients. (abstract) Journal of the Neurological Sciences, Volume 98 Page 300 (Supplement) September 1990
- Seventh International Congress of Neuromuscular Diseases , Munich, Federal Republic of Germany , September 1990
19. Mortel KF., Lotfi J., Meyer JS., Funk J. Long-term Clinical outcome in normal volunteers and patients with Cerebral transient Ischemic attacks. American Neurological Association, 16th Annual Meeting, Seattle, Wash., USA 1991
 20. Lotfi J., Sikaroodi H. Botulinum Toxin for Dystonia in Iranian patients. 1st International Symposium on Medical News. Tehran, Iran October 1999
 21. Lotfi J., Ghaem Maghami AB. et al. Avicenna and Trigeminal Neuralgia Neurology 54, (Supplement 3) Tehran Conference on Neurology, Tehran, Iran April 2000
 22. Lotfi J., Noroozian M. Higher Achievement of Left Handers, Proc. Aust. N. Neuroscience Soc. Vol. II. 12th Annual Meeting Society Australian Neuroscience Society 2000
 23. Lotfi J., Soltanzadeh A. Olfactory Dysfunction in Parkinson's Disease XVII World Congress of Neurology, London, UK, June 2001
 24. Lotfi J., Zamani B. History of Neurology in Iran XVII World Congress of Neurology, London, UK, June 2001
 25. Lotfi J., Fazel M. et al, Carotid Endarterectomy in Iran Journal of Neurology. Vol. 249, (Supplement 1), June 2002, European Neurological Society, Berlin, Germany, June 2002
 26. Lotfi J., Nafisi N. Subarachnoid hemorrhage in Iran European Federation of Neurological Societies, Helsinki, Finland August 2003
 27. Lotfi J., Adibnejad S.
 1. Complication of Interferon Therapy in Multiple Sclerosis
 2. European Committee for Treatment and Research in Multiple Sclerosis ECTRIMS 2003 Milan, Italy, 2003
 28. Lotfi J., Nabavi M. A Study of Multiple Sclerosis in 203 patients. Multiple Sclerosis Vol.9. ECTRIMS 2003, Milan, Italy, September 2003
 29. Lotfi J. Changing Multiple Sclerosis: Epidemiology in Iran MS Forum: MS Across Continents. Insights from Asia and the Middle East. Bangkok, Thailand. 2003.

30. Lotfi J. Multiple Sclerosis in Children Regional MS Forum, Beirut, Lebanon. February 2004
31. Lotfi J.
 1. Side effects of Interferon Beta in MS Journal of Neurology, Vol.251 (Supplement 3) Page 164
 2. Botulinum Toxin in Migraine Journal of Neurology, Vol.251 (Supplement 3) Page 144 14th ENS Barcelona, Spain. June 2004.
32. Lotfi J.
 1. Clinical Course evaluation of patients and progression of MS treated with Novatrone.
 2. Measurement of antibodies to Interferon Beta in Iranian MS patients
 3. Report on 325 patients with MS in Iran 8th EFNS Paris, France. September 2004.
33. Lotfi J. Study of 1714 Iranian MS patients ECTRIMS 2004, Vienna, Austria. October 2004
34. Lotfi J. MS in Adolescents & Children MS Across Continents: Changing knowledge of MS in Asia. Ho Chi Minh City, Vietnam November 2004
35. Lotfi J. Epidemiology of MS in Iran: Redefining efficacy International Speech given on the Epidemiology of Ms in Iran. Kuwait City, Kuwait. December 2004
36. Lotfi J.
 1. Mesenchymal stem cells in the treatment of Multiple Sclerosis.
*Short listed for a prize
 2. Is Multiple Sclerosis increasing in Iran? Gathering the ideas.
 3. 20 years of experience in Wilson's Disease. Journal of Neurology. 252 (Supplement 2) 15th ENS 2005 Vienna, Austria. June 2005
37. Lotfi J.
 1. MS in Iran.
 2. Cognitive Dysfunction in Multiple Sclerosis. European J of N., Vol.12, Supplement 2) Page 135. Symposium on Effective MS Therapy Istanbul, Turkey September 2005
38. Lotfi J. Cognitive Dysfunction in Multiple Sclerosis 9th EFNS Athens, Greece. September 2005

39. Lotfi J.
 1. Childhood and Juvenile MS: Report on 150 cases.
 2. Short & Long Term Perception in MS: Evidence for a behavioral shift. Multiple Sclerosis Vol. 11, Supplement 1 Page 573. 21st CTRIMS/ACTRIMS 2005 Thessaloniki, Greece September 2005
40. Lotfi J., Talebani
 1. Mesenchymal stem cell in MS.
 2. Association of Microchimerism and MS J. of the Neurological Sciences, Vol.238 (Supplement 1) Page 231 WCN Sydney, Australia November 2005
41. Lotfi J. Application of McDonald Criteria in non-classical Multiple Sclerosis MS Across Continents: Advances in the knowledge of MS in Asia. Sydney, Australia November 2005
42. Lotfi J. Side Effects of Interferon in Multiple Sclerosis ECTRIMS, Madrid, Spain September 2006

INTERNATIONAL MEDICAL PUBLICATIONS

1. Faghihi-Shirazi F., Lotfi J., et al: The pathogenesis of Potts Paraplegia and the effect of surgical intervention in it's course of prognosis. Acta Medica Iranica 20 Pages 93-105. 1997.
2. Mirchamsey H., Abbassioun K., Lotfi J , et al: Isolation & characterization of a defective measles virus from patients' brain biopsies with subacute sclerosing panencephalitis. Intervirolgy 9: Pages 106-108. 1978
3. Lotfi J., Nikbin B., Derakhshan I., et al: Histocompatibility antigens (HLA) in Multiple Sclerosis in Iran. J Neurosurg Psychiatry 41:Pages 699-701. 1978
4. Derakhshan I , Lotfi J , Abbassioun K Degenerative progressive myoclinic epilepsy:electrokymographic observations. Can J Neuro Sci 6 (No 1) Pages 65-68. 1979
5. Derakhshan I., Lotfi J., Kaufman B.: Ophthalmoplegia, ataxia, and hyperreflexia (Fisher Syndrome) European Neurology 18: Pages 361-366. 1979
6. Derakhshan I., Shafyi A., Lotfi J., Scillian JJ.: An unusual form of measles meningoencephallitis. J Neuro 221:Pages 169-198. 1979.
7. Derakhshan I., Sabbouri M., Lotfi J.: Holoprosencephaly, computed tomography and pneumoencephalographic finding with anatomical correlation. Arch Neurol 37: Pages 55-57. 1980
8. Lotfi J., Derakhshan I.: Subacute sclerosing panencephalitis in Iran. Iranian Journal of Medical Sciences 11:Pages 97-110. 1980
9. Massoud A., Lotfi J., et al : Lymphocytes subpopulation and cell mediated immunity in multiple sclerosis in Iran. Acta Medica Iranica 22(No.3).Pages 195-208.1980.
10. Derakhshan I., Massoud A., Froozanfar N., Nikbin B., Lotfi J.: Subacute sclerosing panencephalitis in Iran: Clinical and Immunological study of 23 patients. Neurology (NY) 31:1Pages 77-180. 1981.
11. Lotfi J., Derakhshan I., Abbassioun K., Mirchamsey H.: Subacute sclerosing panencephalitis in Iran: Clinical and Immunological characterization. Proceedings of the First International Symposium on SSPE, Haddad FS, Matossian R (Eds) Bouheiry Bros. Press, Beirut, Lebanon. 1983
12. Anaraki F., Tabatabaiyan A., Lotfi J.: Immunological features in subacute sclerosing panencephalitis treated with transfer factor. Proceedings of the First International Symposium on SSPE, Haddad FS, Matossian R (Eds) Bouheiry Bros. Press, Beirut, Lebanon. 1983
13. Shafyi A., Lotfi J., Mirchamsey H.: Subacute sclerosing panencephalitis in Iran. Kitassato Arch Exp Med (Japan) 57(No.4). December 1984

14. Lotfi J, Meyer JS.: Cerebral hemodynamic and metabolic effects of chronic alcoholism. Cerebrovascular and Brain Metabolism Reviews 1:Pages 2-25. 1989.
15. Meyer J., Rogers R, McClintic K., Mortel KF., Lotfi J.: Randomized clinical trial of daily aspirin therapy in multi-infarct Dementia JAGS 37: Pages 549-555. 1989
16. Meyer JS., Lotfi J.: Vascular and multi-infarct dementia demography, risk factors, prevention, and treatment. Neurology in Europe I, Bariko F, Gerstenbrand F, Turcani P (Eds), John Libbey & Co Ltd., Pages:109-114. 1989
17. Meyer J., Lotfi J., Kobari M.: Treatment of migraine and cluster headache with calcium antagonists. Cerebral Ischemia and Calcium, Hartman A., Kuschinski W.(Eds), Springer-Verlag, Berlin & Heidelberg. Pages 410-418. 1989
18. Meyer JS., Lotfi J., Martinez G., Careselli JS., Mortel KF., Thornby JL.: Effects of medical and surgical treatment on cerebral perfusion and cognition in patients with chronic ischemia. Surg Neurol 34:Pages 301-308. 1990
19. Lotfi J.: Abu-Ail Sina and the description of Trigeminal Neuralgia. Acta Medica Iranica, Vol. 34, Pages 55-60. 1996
20. Lotfi J.: Long term clinical outcome in normal volunteers and patients with transient ischemic attack. Acta Medica Iranica , 37(1):Pages 49-51. 1999
21. Ale-yassin H., Lotfi J., et al: Multiple sclerosis: A study of 318 patients. Arch Iran Med, 5 (1) Pages 24-27. 2002
22. Noroozian M., Lotfi J.: Academic Achievement & Learning Abilities in Left-handers. Cortex 38. Pages 779-785. 2002.
23. Sanati A., Lotfi J., et al: Lack of association between Leber's Optic Atrophy and Multiple Sclerosis European Neurology 51 Pages 68-71. 2004:
24. Izad, Vodigani, Lotfi, et al: Interferon Gamma Gene Polymorphism in Iranian patients with MS. Iranian Journal of Allergy, Asthma, & Immunology Vol. 3, No.3, September 2004
25. Lotfi J., Meftapoor M., Sharasbi AA., et al: Novatrone treatment in Multiple Sclerosis. Iranian Journal of the Faculty of Medicine 62 No.10 Pages 815 -820. 2005.
26. Booya F., Bandarian F., Larijani B., Pajouhi M., Nooraei M., Lotfi J., et al: Potential risk factors for Diabetic Neuopathy: A Case Control Study.
27. Soltanzadeh A., Soltanzadeh P., Nafissi S., Ghorbani A., Sikaroodi H., Lotfi J. et al: Wilson's Disease: a great masquerador. Eur Neurol 2007; 57(2):80-5. Epub 2006 Dec 15.
28. Lotfi J., et al: Side Effects of Interferon Beta 1a (Avonez) in Multiple Sclerosis In Iran. Medical Journal Of the Islamic Republic of Iran Vol. 23 #3 2005. (Printed in Persian)

28. Jafarian S., Gorouhi, Lotfi J., et al: Reverse Association Between High Altitude Headache and Nasal Congestion Cephalalgia, 27, Pages 899-903, 2007
29. Jafarian S., Gorouhi, Lotfi J., et al: High Altitude Sleep Disturbance Sleep Medicine 2007
30. Jafarian S., Gorouhi, Lotfi J., et al: Low Dose Gabapentin in the Treatment of High Altitude Headache Cephalalgia 2007
31. Jafarian S., Gorouhi, Lotfi J., et al: Sumatriptan for the prevention of Mountain Sickness Am. Neurology, 62(3) 273-77, Sept. 2007
32. Lotfi J Profile of cytokine gene polymorphism in multiple sclerosis Mult. Sclerosis, 13(2) 253-5, March, 2007.
33. Lotfi, J. Does Mesenchymal stem cell therapy help multiple sclerosis? Iran. J. Immunology 4(1) 50-57) March, 2007
34. Jafarian S, Abolfazli R, Lotfi J Gabapentin for prevention of hypoxia-induced headache. J. Neurol Nuerosurg Psychiatry 79 (3) 321-323, March, 2008.
35. Jafarian S, Gorouhi F, Lotfi J High altitude sleep disturbance, Sleep Med, 9(4) 446-449, May 9, 2008
36. Lotfi, J IL-1, IL-1R and TNF alpha gene polymorphism in multiple sclerosis. Iran J. Allergy, Immunology March 7, 2008, 37-40.
37. Lotfi, J Respiratory rate within the first hour of ascent predicts acute mountain sickness. Arch Iran Med (2) 152-156, Mar 11, 2008.
38. Lotfi, J Frequency of speech impairment among Iranian multiple sclerosis patients. Iran. J. Neurol. Vol. 8 #28, 2010, 619-627.
39. Sahraian, M.A., Khorramnia, S., Lotfi, J., et al. Multiple sclerosis in Iran Study of 8,000 patients, European Neurol 2010.